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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/643,948 | 08/23/2000 | Kaori Yasufuku | 2423-6 | 9826 |

22204 7590 03/31/2003

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EXAMINER

FIGUEROA, FELIX O

ART UNIT PAPER NUMBER

2833

DATE MAILED: 03/31/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Handwritten mark

Office Action Summary

Application No.

09/643,948

Applicant(s)

YASUFUKU ET AL.

Examiner

Felix O. Figueroa

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 9, 14 and 15 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Tondreault (US 5,769,668) in view of Geib (US 4,761,140).

Tondreault discloses a connector body (10) having a receiving part (14) having a contacts (20) provided in a groove that contact the conductive pad on top and bottom surfaces of the a module, a pair of lateral supporting parts (24,26) which extend from the receiving part, and a positioning mechanism (28,30) to hold a module in a forward-rearward direction; the lateral supporting parts including a stepped part formed on an inner side. Tondreault discloses substantially the claimed invention except for metallic cover.

Geib teaches the use of a hinged, removable, metallic cover (14) including first connection means (102) and second connection means (98) that engage a slotted portion formed on an outer side of lateral supporting parts, to help keep a module in place. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use a cover, as taught by Geib, to help keep the module from moving from the connecting position.

Alternatively, Geib shows that a metallic cover (14) including first connection means (102) and second connection means (98) is an equivalent structure known in the art for retaining structure of Tondreault. Therefore, because these two retention structures were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious the substitution of the retention structure of Tondreault for a metallic cover of Geib to keep the module from moving from the connecting position.

Claims 5, 6, 10, 11, 16, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tondreault and Geib as applied to claims 4, 9 and 15 above, and further in view of Loo et al. (US 5,648,890).

Loo teaches the use of a cover (16) having a window (38) and a heat sink (20) in the window covering a conductive member (12) to dissipate the heat from the conductive member. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a heat sink covering a conductive member, as taught by Loo, to perform a heat dissipation function.

Claims 7, 8, 12, 13, 18 and 19 remain rejected under 35 U.S.C. 103(a) as being unpatentable over Tondreault and Geib as applied to claims 4, 9 and 15 above, and further in view of Cronin et al. (US 6,246,583).

Cronin teaches a cover including a contacting part to transfer the thermal energy to a heat sink (211). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to use a contacting part, as taught by Cronin, to transfer the thermal energy to the heat sink.

Response to Arguments

Applicant's arguments filed 02/05/03 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Geib discloses a hinged, removable, metallic cover (14) including first connection means (102) and second connection means (98) that engage a slotted portion formed on an outer side of lateral supporting parts, to help keep a module in place.

In response to applicant's arguments that there is no reason to combine because the connector of Tondreault already includes locking members to keep the module in place, as discussed on the Personal Interview held 01/07/03, the mere fact that Tondreault includes such locking members does not prevent one in the art from using a hinged cover, as taught by Geib, to help keep a module in place. It is further noted that redundancy is often a desire characteristic for maintaining electrical connections together.

In response to applicant's arguments that redundancy is not desired because it would increase complexity, cost, size and weight of a connector, there is no clear

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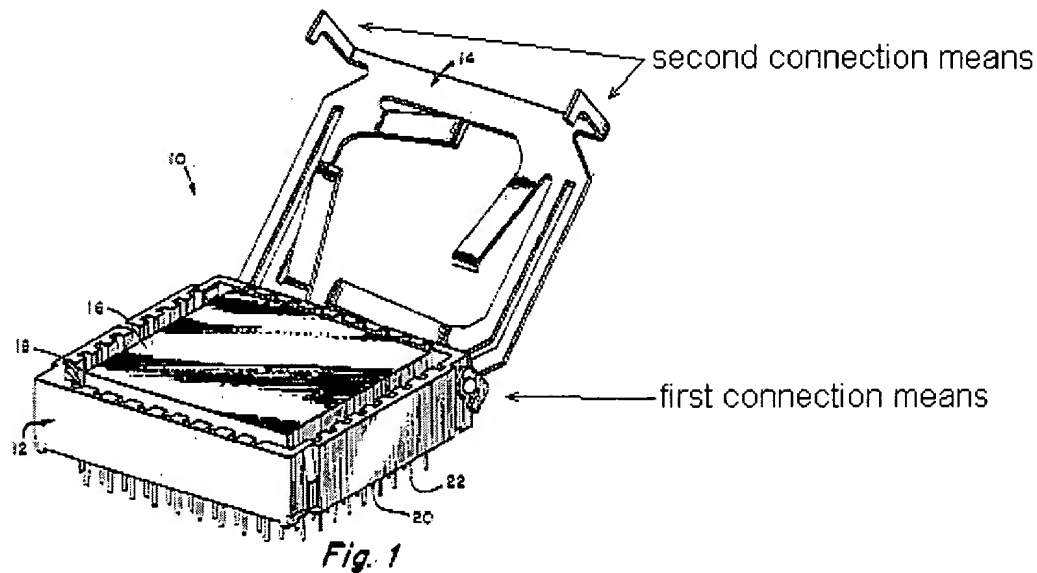
evidence that the complexity and the size of the connector of Tondreault would be affected by adding a cover, as taught by Geib. Additionally, it appears that the relationship between cost/weight vs. security of the connection would have been evident to one skill in the art at the time the invention was made, and thus would have valued this concern at the time of the invention.

In response to applicant's argument that "physical modification would be necessary" in order to combine the cover of Geib with the connector of Tondreault, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response to applicant's arguments that Geib does not teach a metallic cover with "a first connection means for connection to a receiving part of the connector body,

and a second connection means for connection to a lateral supporting part of the connector body", see the following figure.



In response to applicant's arguments (on claim 20) that Loo does not teach the heat sink and the cover being "a single structure" or "an integral cover-heat sink structure", please note that claim 20 recited "a heat sink secured to said metallic cover" not a single/integral structure.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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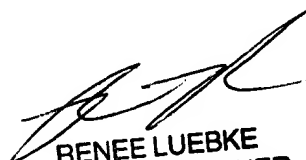
extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (703) 308-0097. The examiner can normally be reached on Mon.-Fri., 8:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

ffr
March 27, 2003


RENEE LUEBKE
PRIMARY EXAMINER